# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/087,940 | 02/27/2002 | Dwip N. Banerjee | AUS9-2001-0370-US1 | 5268 |

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| EXAMINER |
|---|
| LIN, KELVIN Y |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2142 | |

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/087,940 | BANERJEE ET AL. |
| | Examiner | Art Unit |
| | Kelvin Lin | 2142 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>23 June 2005</u>.

2a)☒ This action is **FINAL**.  2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-26</u> is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-26</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>27 February 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All  b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

# Detailed Action

## *Response to Arguments*

Application's argue with respect to claims 1-26 have been considered but are moot in

view of the new ground(s) of rejection.

## *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1.      Claims 1-26 are rejected under 35 U.S.C 103(a) as being unpatentable over

McCanne et al., (US Patent No. 6611872) in view of Jorgensen J., (US Pat.

No. 6424424).

2.      Regarding claim 1, McCanne teaches a method for multicasting content to

remote users, comprising:

- • designating a portion of the content to each one of plural multicast

  routers (McCanne, col.7, l.9-13, col.10, l.5-12);

- • registering a data stream of interest for each user (McCanne,

col.24, l. 10-13);

- associating each user with a multicast router that geographically

    corresponds to the particular user and the data stream of interest

    registered by the particular user (McCanne, col.24, l.12-13);

Although McCanne teaches the multicasting content to remote users at the

above mentioned prior art , McCanne still fails to teach a fixed filter system and

responding to a homogeneous request.

However, Jorgensen teaches the

- Using a fixed filter system to analyze the registered streams of

    interest of adjacent routers and to create a reservation for each

    stream of interest as a thread based on bandwidth (Jorgensen, col.

    40, l.3-10, in which the multipoint control unit determines the

    capabilities of audio and video corresponds to create a reservation

    for each streams of interest).

- Responding to homogeneous requests simultaneously if more than

    one reservation from various hosts for a same interest thread is

    made ( Jorgensen, col.36, l.9-11, l.19-29, , col. 39, l.8-10, col. 40,

    l.20-24, in which ATM corresponds to the homogeneous requests

    over the voice/ video channel simultaneously) , and

- transmitting the content to the users via the multicast routers

    based on the reservation (Jorgensen, col.44, l.57-67).

Therefore, It would have been obvious to one of ordinary skill in the art at

the time the invention was made to have combined the teachings of

Jorgensen's multicasting system for providing personalized content with different

bandwidth. The motivation would be for performing multicast communication in

network to incorporate with the content of TCP/IP, TV, and IGMP easily as

taught by Jorgensen.

3.      Regarding claim 2, McCanne further discloses the method claim 1, wherein the

content is delivered hierarchically from a host sever at a top level that controls the

entire portion of the content to the plural multicast routers at a mid level that

receive the designated portions of the content that they are capable of

accommodating to the users at a lowest level which receive parts of the

designated portions representing respective user registered data streams of

interest (McCanne, col.17, I.47-57, col.18, I.10-15, I.60-62, I.65-67, col.19, I.54-55,

col.25, I.11-15).

4.      Regarding claim 3, McCanne further discloses the method claim 1, wherein

registering the data stream of interest includes requesting a user to identify the

user's particular streams of interest to the multicasting system (McCanne, col. 9,

I.27-37).

5.      Regarding claim 4, McCanne further discloses the method of claim 1, further

comprising using network socket options with special flags to register streams of

interest for particular multicast groups (McCanne, col.12, I.21-23)

6.      Regarding claim 5, McCanne further discloses the method of claim 1, further

comprising locating a multicast router on a subnet for receiving identified streams

of interest and adding the streams of interest to the located router's list of streams of interest (McCanne, col. 25, l.11-38).

7.      Regarding claim 6, McCanne further discloses the method of claim 1, further comprising communicating the router's streams of interest to multicast groups of interest and to other multicast routers to allow relevant routers on the network to have information about the streams of interests of other routers (McCanne, col.24, l.39-67).

8.      Regarding claim 7, McCanne further discloses the method of claim 1, further comprising examining the streams of interest lists of other routers and forwarding users content based on their identified streams of interest (McCanne, col.19, l.19-25).

9.      Regarding claim 8, McCanne further discloses the method of claim 1, wherein the network is the Internet (McCanne, col.10, l.27).

10.     Regarding claim 9, McCanne further discloses the method of claim 8, wherein the content includes at least one of audio and video Internet multimedia broadcast (McCanne, col.3, l.11-17).

11.     Regarding claim 10, McCanne further discloses in a computer network system, a method for providing content from a host server to remote network users that connect to the network with different bandwidths, the method comprising:

- establishing group membership for a multicast group (McCanne, col.6, l.37-40);

- establishing an individualized set of broadcast criteria (McCanne,

col.16, l.53-63);

- disseminating broadcast data within the group into discrete
  segments (McCanne, col.5, l-10-11, col.11, l.17-21); and

- determining which segments of the broadcast data will be sent to
  remote servers of the network (McCanne, col.15, l.4-7);

- establishing an individualized set of broadcast criteria that includes
  registering streams of interest of plural routers of the host
  (Jorgensen, col. 41, l.49-54, col.42, l.57-67, col. 43, l. 24-39, col.44,
  l.57-67);

- Using a fixed filter system to analyze the registered streams of
  interest of adjacent routers and to create a reservation for each
  stream of interest as a thread based on bandwidth (Jorgensen, col.
  40, l.3-10, in which the multipoint control unit determines the
  capabilities of audio and video corresponds to create a reservation
  for each streams of interest;

- Responding to homogeneous requests simultaneously if more than
  one reservation from various hosts for a same interest thread is
  made ( Jorgensen, col.36, l.9-11, l.19-29, , col. 39, l.8-10, col. 40,
  l.20-24,  in which ATM corresponds to the homogeneous requests
  over the voice/ video channel simultaneously).

12.     Regarding claim 11, McCanne further discloses the method of claim 10, wherein
establishing an individualized set of broadcast criteria includes registering

streams of interest of the host (McCanne, col.9, l.19-21).

13.     Regarding claim 12, McCanne further discloses the method of claim, further

comprising using network socket options with special flags to register streams of

interest for particular multicast groups (McCanne, col.12, l.21-23).

14.     Regarding claim 13, McCanne further discloses the method of claim 10, further

comprising communicating the router's streams of interest to multicast groups of

interest and to other multicast routers to allow relevant routers on the network to

have information about the streams of interests of other routers (McCanne,

col.24, l.39-67).

15.     Regarding claim 14, McCanne further discloses the method of claim 13, further

comprising examining the streams of interest lists of other routers and forwarding

users content based on their identified streams of interest (McCanne, col.19,

l.19-25).

16.     Regarding claim 15, McCanne further discloses the method of claim 10, wherein

the network is the Internet (McCanne, col.10, l.27).

17.     Regarding claims 16-20 have similar limitations as claims 1,2,5, and 8.

Therefore, Claims 16-20 are rejected for the same reasons set forth in the

rejection of claims  1,2,5, and 8.

18.     Regarding claims 21-26 have similar limitations as claims 1-5.

Therefore, Claims 21-26 are rejected for the same reasons set forth in the

rejection of claims  1-5.

### *Conclusion*

Application's amendment necessitated the new ground(s) of rejection presented in this Office action, Accordingly, **THIS ACTION IS MADE FINAL.** See MEPE 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first replay is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE MONTH shortened statutory period, then the shortened statutory period will expire on the date advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTH from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelvin Lin whose telephone number is 571-272-3898. The examiner can normally be reached on Flexible 4/9/5.
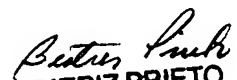
.If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system.  Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

08/11/05
KYL

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PRIMARY EXAMINER